

WHAT IS CLAIMED IS:

1. In a cooking vessel for use in a microwave oven, a microwave cooking vessel comprising:

a vessel having a bottom surface, a body wall, and an open region, wherein the open region extends upwardly from the bottom surface to terminate at the peripheral flange;

a heating element adapted to convert microwave radiation into thermal energy, said heating element composed primarily of a mixture of elastic material and ferrite particles, wherein the top face of the said heating element is attached to the outer bottom surface of said vessel so as to distribute heat along the bottom of said vessel; and

a cover having a dome-shape and comprising a handle for engaging and disengaging said cover onto said vessel, plurality of apertures which provides a pathway for heated air and moisture so that said cover does not disengage from said vessel when the microwave cooking vessel is in use, and an annular flange which sits above of the peripheral flange of said vessel when said cover is engaged to said vessel, wherein said cover is composed primarily of microwave radiation reflecting material so as to reflect microwave radiation and preserve the taste of foodstuff being cooked in the microwave cooking vessel.

2. The microwave cooking vessel of claim 1, wherein the elastic material of said heating element is silicon rubber.

3. The microwave cooking vessel of claim 2, further comprising plurality of thermal insulating members provided on the bottom face of said heating element to provide support for said vessel and to also ensure that the thermal energy stored in said heating element is not rapidly transferred to an inner surface of the microwave oven.

4. The microwave cooking vessel of claim 3, wherein said heating element is attached to the outer bottom surface of the vessel by a heat press process, said heat press process comprising the steps of applying a layer of adhesive to the outer bottom surface of the vessel, drying the vessel for about an hour in an area having a temperature about 180°C and pressing the top face of said heating element onto the outer bottom surface of said vessel at temperatures ranging between 150 to 250° C.

5. The microwave cooking vessel of claim 4, wherein said vessel further comprises a plurality of layers, a non-stick inner layer, a thermal conductive middle layer, and a protective outer layer .

6. The microwave cooking vessel of claim 5, wherein the thermal conductive middle layer of said vessel is primarily composed of aluminum metal.

7. The microwave cooking vessel of claim 6, wherein said cover further comprises an elastic ring to trap moisture and heated air, and to ensure that arcing does not occur in between the annular flange of said cover and the said vessel.

8. The microwave cooking vessel of claim 7, wherein said heating element further comprises a central heating zone and an outer heating zone, wherein the central zone has a greater concentration of ferrite particles than the outer zone.

9. The microwave cooking vessel of claim 8, wherein the protective outer layer is composed primarily of paint that can withstand at least 210° C.